



2009 – 2010 Sustainability Overview

A message from Mayor Charles Meeker

Welcome to the inaugural edition of Raleigh's Annual Sustainability Report. The City of Raleigh has been actively engaged for years in providing and enhancing the environmental quality of life for our residents and businesses. In June 2008, we took another step in that direction by launching the Sustainable Raleigh Program.

Our vision for Raleigh is to be a 21st century city of innovation and environmental awareness. To accomplish this goal, we are incorporating the principles and practices of sustainability throughout our offices and within the services we provide.

Our commitment to you is ensuring that our city is prepared for the future while reinforcing the strengths that make Raleigh a leading destination and home for businesses and families alike. We can accomplish this commitment by focusing on economic strength, environmental stewardship, and innovative technologies for businesses and residents. I hope that you have already noticed changes to City programs that start to implement sustainable practices.

Mayor, City of Raleigh

A word from Paula Thomas

In our first year, we have made a lot of progress to build Sustainable Raleigh from the ground up. We have developed a shared understanding of what sustainability means to the City of Raleigh. We have worked to educate city staff on how sustainability impacts their jobs, and developed partnerships and collaborations with area colleges, universities, non-profits, businesses, and surrounding jurisdictions. We have initiated some exciting projects, are enhancing programs already in process, and have been recognized nationally for our leadership.

I am inspired by the tremendous successes and ambitious projects the City of Raleigh is pursuing. I am looking forward to being a resource for the community on issues that have an impact on the future of the city and our region.

Manager, Office of Sustainability, City of Raleigh



Environmental Design



Water Gardens



Alternative Fuel Vehicles

Mission Statement

The City Council adopted its mission statement on June 2008, and reaffirmed it in December 2009.

"We are a 21st Century City of Innovation focusing on environmental, cultural and economic sustainability.

We conserve and protect our environmental resources through best practices and cutting edge conservation and stewardship, land use, infrastructure and building technologies.

We welcome growth and diversity through policies and programs that will protect, preserve and enhance Raleigh's existing neighborhoods, natural amenities, rich history, and cultural and human resources for future generations.

We lead to develop an improved neighborhood quality of life and standard of living for all our citizens.

We work with our universities, colleges, citizens and regional partners to promote emerging technologies, create new job opportunities and cultivate local businesses and entrepreneurs.

We recruit and train a 21st Century staff with the knowledge and skill sets to carry out this mission, through transparent civic engagement and providing the very best customer service to our current citizens in the most efficient and cost-effective manner."

Sustainable Raleigh

Sustainability is a broad term that addresses three fundamental principles: economic strength, environmental stewardship, and social equity. We believe a sustainable community is a thriving community; one that provides opportunity for all residents, cares for the environment, and has long term vision for a prosperous future.

Sustainable Raleigh was created to provide guidance for policy development and goal setting for the City of Raleigh based on these three fundamental principles. We partner with our local business community, universities, civic, and non-profit organizations to build relationships, and work collaboratively with all departments within the City of Raleigh in our mission to become a leader in sustainability.

We use the following definition of sustainability:

"Sustainable communities encourage people to work together to create healthy communities where natural and historic resources are preserved, jobs are available, sprawl is contained, neighborhoods are secure, education is lifelong, transportation and health care are accessible, and all citizens have opportunities to improve the quality of their lives."

The President's Council on Sustainable Development



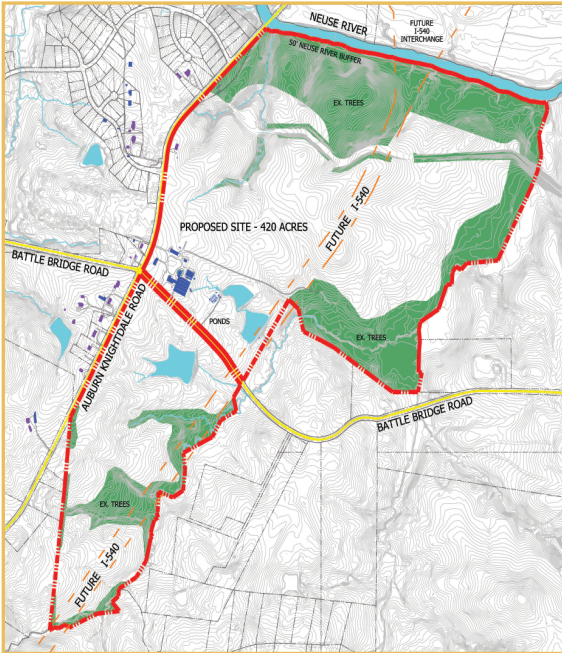
2009

- #1 Best Places for Business and Careers, *Forbes Magazine*
- #1 Fastest-Growing Metropolitan Area in the Country, *US Census*
- #1 Top City for Small Business, *Bizjournals*
- #3 Most Wired City, *Forbes Magazine*
- #10 Best Performing Cities, *Miliken Institute*

2008

- #2 Best City to Live, Work, and Play, *Kiplingers*
- #3 Most Educated Workforce, *Business Facilities*
- #5 Best Medium-Sized City for Families with Children, *Who's Your City*
- #1 Best Place for Young Adults, *Bizjournals*
- Top 15 Place for Cultured Retirement, *Smithsonian.com*

Raleigh: A Model Sustainable Community



In keeping with Raleigh's commitment to sustainability, we're actively pursuing a significant development project that will integrate environmental, economic, and social equity principles as a living model for a 21st century community. This is Raleigh.

This 420 acre site in eastern Wake County, jointly owned by the City and County, will be a mixed-use community with residences, schools, an environmental education center, commercial space, and government services to serve people of all income levels.

Our goals are to:

- Encourage public-private partnerships
- Promote resource recycling
- Educate the public on sustainability
- Provide access to open space and greenways
- Encourage sustainable development
- Promote pedestrian and bicycle traffic, active water protection, and native biodiversity
- Utilize best management practices in water, energy, and waste management

Raleigh's Federal Stimulus Funding at Work

The City of Raleigh has secured \$3.82 million from the Energy Efficiency and Conservation Block Grant (EECBG) from the U.S. Department of Energy as part of the federal stimulus program. The purpose of the EECBG program is to provide federal grants to local governments to reduce fossil fuel emissions and improve energy efficiency provide federal grants to local governments to reduce fossil fuel emissions and improve energy efficiency.

Energy efficiency, conservation, and renewable energy programs and projects are the building blocks for increased economic vitality, energy security, and environmental quality. We anticipate over 100 Raleigh jobs created or retained during a three year period as a result of the stimulus funding.

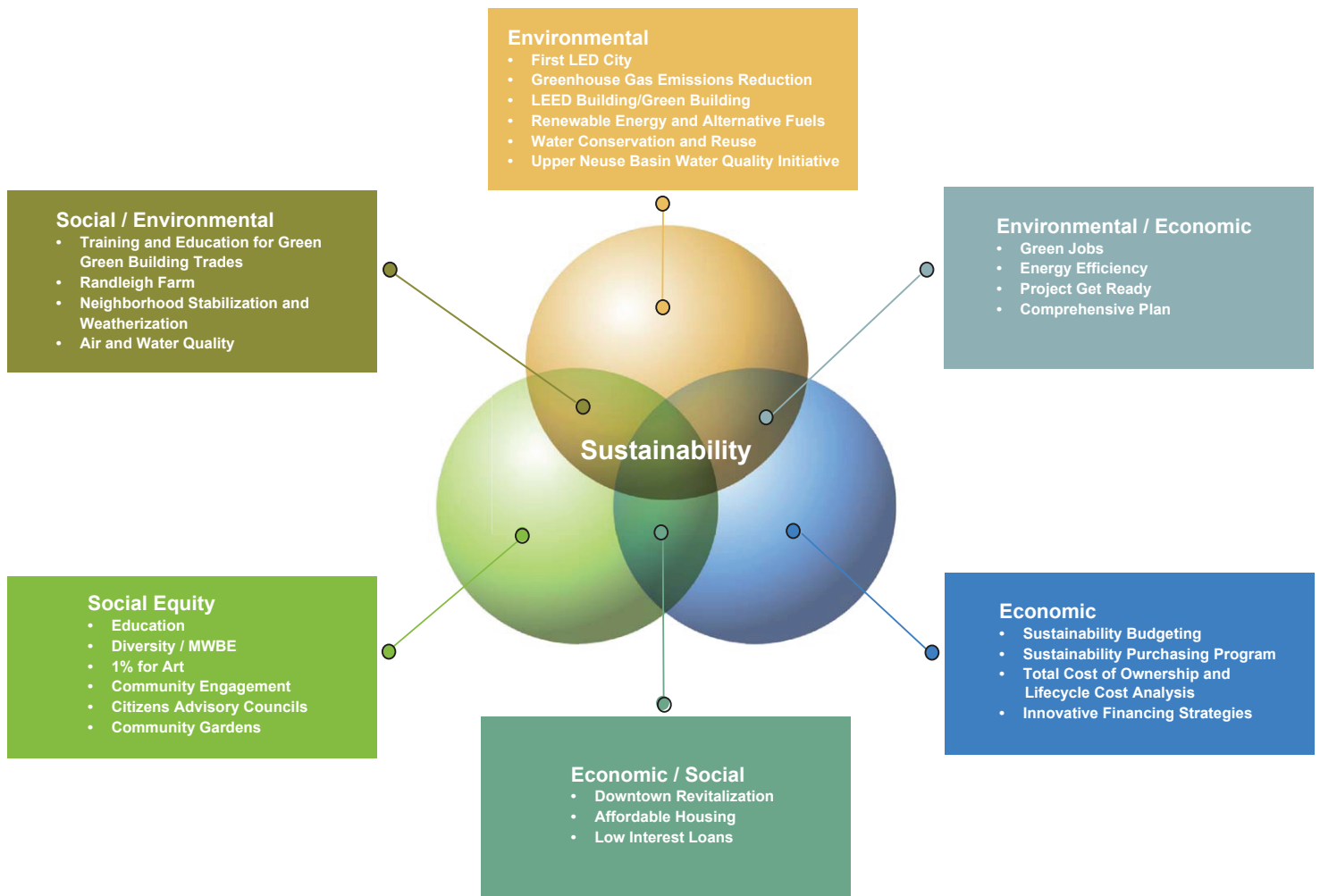
The grant will fund projects and programs that fall into four categories for residential and commercial use.

- I. Creation of low interest revolving loan programs for residential and commercial energy efficiency and conservation improvements;
- II. Development of a comprehensive climate action plan to reduce fossil fuel consumption, greenhouse gas emissions, and develop a renewable energy strategy;
- III. Implementation of projects focused on providing the green infrastructure necessary to reduce energy use within City operations;
- IV. Creation of the Green Builders Certification and Community Education Program to provide the necessary training and certification for private sector green building professionals and associated trades, as well as City inspectors and code enforcement staff.

For more information on how Raleigh is using stimulus dollars, or for more information on these programs, please visit <http://www.raleighnc.gov/FederalStimulus>.

Framework for Sustainability

Raleigh's commitment to sustainability is a cornerstone of its vision for the future. That vision is broad and comprehensive, focusing on the interdependent relationships of environmental stewardship, economic strength, and social integrity. These three fundamental elements of sustainability define the vision and will serve to guide the decisions Raleigh will need to make as a 21st Century City of Innovation.



Goals

- Develop a city-wide sustainability plan that coordinates all initiatives throughout the City of Raleigh
- Provide guidance for policy statements and goal setting that will drive integration of sustainability principles into the City of Raleigh's decisions and investments
- Communicate the City of Raleigh's sustainability initiatives and plan to residents, and be a resource for the community



Community Gardens



Community Policing



Affordable Housing

2009 Projects and Programs

- Selected by the Rocky Mountain Institute for **Project Get Ready**, a pilot project to help prepare the City for the 2010 electric vehicle roll out by building the required electric plug-in infrastructure
- Collaborated with Downtown Raleigh Alliance for the launch of the City R-Line Downtown Circulator **hybrid electric bus system** to reduce the need for individual automobile use
- **Increased the use of alternative fuels** including Compressed Natural Gas, E-85, and biodiesel fuels to reduce greenhouse gas emissions and reduce dependence on fossil fuels
- Development of a **1.3 megawatt and 250 Kilowatt solar PV farm** at the Neuse Wastewater Treatment Plant and the EM Johnson Water Treatment Plant, respectively
- Installed **solar hot water and green roof systems** at area fire houses
- Initiated the **greenhouse gas emissions** inventory to set a baseline for our carbon footprint, enabling the City to develop an emissions reduction strategy
- Organized training with the UNC School of Government for NC municipalities on **innovative financing strategies for sustainability initiatives**
- Developed the City's first **sustainable budgeting process** that focuses on long term concepts such as total cost of ownership, lifecycle cost analysis, and return on investment
- Initiated the creation of a **sustainable purchasing program** that prioritizes local purchasing and sustainable goods and services
- Created and launched the Sustainable Raleigh website: www.raleighnc.gov/SustainableRaleigh
- Secured the Department of Energy's **Energy Efficiency Conservation Block Grant (EECBG)**. The grant will fund 12 residential and commercial programs focused on reducing environmental impact and creating green jobs
- Developed the internal **City of Raleigh sustainability revolving loan fund**. The goal is to encourage departments to initiate projects that help reduce Raleigh's carbon footprint
- **Adopted our 2030 Comprehensive Plan** and initiated the creation of a new development code in the form of a Unified Development Ordinance (UDO)
- Designed or built capital projects to **LEED Standards**, including: Neuse River Waste Water Treatment Plant, Raleigh Convention Center, D.E. Benton Water Treatment Plant Facility, Clarence E. Lightner Public Safety Center, and the new solid waste facility
- Developed regional and national **public and private partnerships**
- Initiated a **server virtualization** plan to consolidate the City's servers to increase efficiency and reduce power and cooling costs
- Converted to **single stream recycling** and implemented **efficient routing software** for solid waste collection
- Secured \$1.3 million grant for installation of a **geothermal system** at the new Solid Waste Operations Service facility



Green Jobs



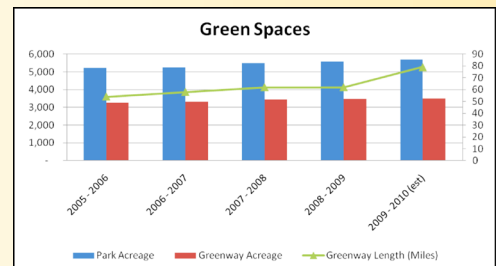
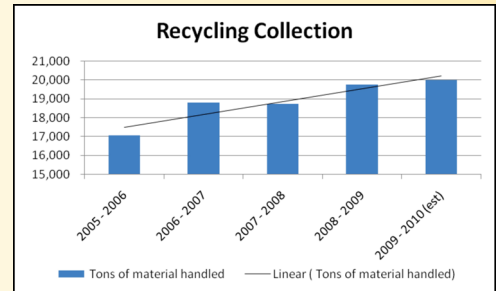
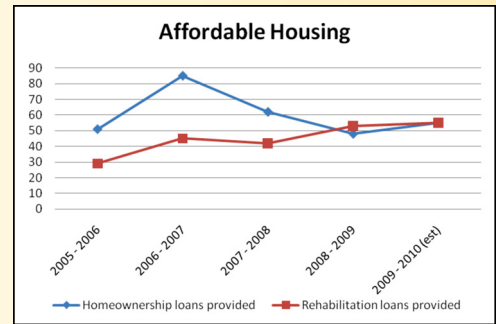
Economic Development



Vibrant Downtown

Sample Metrics of Success

- Increased the number of organized neighborhood-based groups on the Raleigh Neighborhood Registry from 144 to 162, an 11% increase
- Increased the number of Foster Grandparents from 59 to 80, a 36% increase, and the number of sites for the Foster Grandparent Program from 20 to 25, a 25% increase
- Converted 85% of traffic lights to LED bulbs, with the goal of 100% conversion by the end of 2011
- Replaced older two-monitor stations with more efficient large monitors within Emergency Communications, saving 15,000 kwh per year and reduced the overall equipment needs in the department
- Identified over \$250,000 in tax payer savings on City of Raleigh electricity bills through an analysis by the Energy Management staff
- Installed Solar LED Lights at City parks, streets, and other City facilities, saving nearly \$215,000 in tax payer dollars, 1.87 million kwh, and 1,210 tons of CO2. That's enough to power 166 households each year and equivalent to taking 211 cars off the road
- Implemented Periscope, a building intelligence program that allows our Energy Management staff to identify and correct issues with how our buildings utilize equipment and energy. The program has been implemented in 20 municipal facilities and has already started saving energy and money



Partnerships and Collaborations

Sustainable Raleigh is working with local and national businesses and organizations, including:

- Advanced Energy
- Climate Communities
- Cree
- Downtown Raleigh Alliance
- Environmental Defense Fund
- Greater Raleigh Chamber of Commerce
- ICLEI - Local Governments for Sustainability
- NC Solar Center
- Progress Energy
- Rocky Mountain Institute
- Sierra Club
- NC State Energy Office
- Triangle J Council of Government
- Urban Sustainability Director's Network
- Forged relationships with North Carolina State University, Meredith College, Wake County, Town of Chapel Hill, Duke University, Durham City and County, and Town of Cary

Looking Forward

We have made tremendous progress this year, bringing all departments together to coordinate all our activities and setting the stage for the transition to being a national leader for sustainability.

Now that we have the basics in place, we are able to leverage this foundation and take on additional major initiatives that will accelerate the pace of adoption and improvement. We've educated our workforce and are using this knowledge to raise the bar for how we measure our success.

The next two years will have ground breaking programs that will focus on improving the quality of life for all residents, saving tax payer dollars, and developing a comprehensive climate action plan. We continue to look for ways we can develop public and private partnerships to bring dynamic programs to Raleigh. Sustainable Raleigh is actively pursuing opportunities to ensure our city is a 21st Century City of Innovation.



Sustainable Raleigh

919.996.3840

www.raleighnc.gov/SustainableRaleigh